



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification n <sup>6</sup> : <b>A63F 9/22</b>	<b>A3</b>	(11) International Publication Number: <b>WO 96/25989</b> (43) International Publication Date: 29 August 1996 (29.08.96)
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(21) International Application Number: PCT/US96/02348

(22) International Filing Date: 23 February 1996 (23.02.96)

(30) Priority Data:  
08/394,136 24 February 1995 (24.02.95) US

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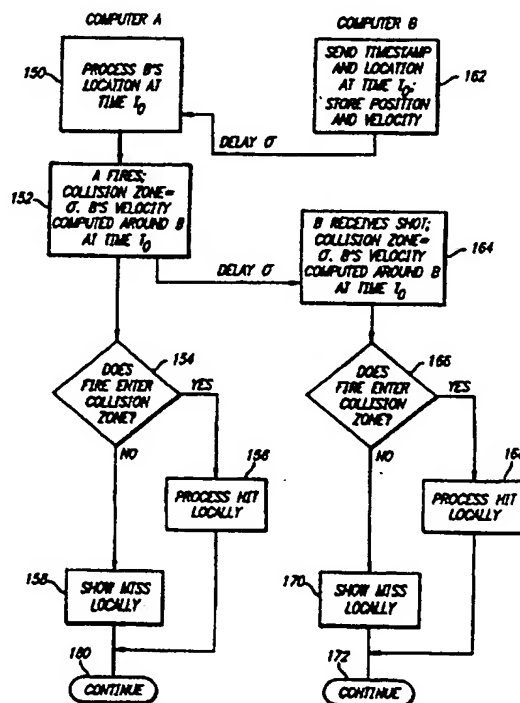
(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

**Published***With international search report.**Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.*(88) Date of publication of the international search report:  
26 September 1996 (26.09.96)

(54) Title: METHOD AND APPARATUS FOR MINIMIZING THE IMPACT OF NETWORK DELAYS

## (57) Abstract

The methods and apparatus of the present invention determine expected network delays and alter program parameters based upon the determined delays. During the implementation of an interactive program, program parameters are adjusted based upon the expected delay and the program is not halted between transmission times. In one embodiment, with reference to computer games, the zone around which a game object is determined to be "hit" is expanded to account for the game object's motion during the delay period. In another embodiment, the effect of the network delay is minimized by not implementing a player's input on the player's computer until a specified time has elapsed.



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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 96/02348

## A. CLASSIFICATION OF SUBJECT MATTER

IPC6: A63F 9/22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: A63F, H04Q, G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO, A1, 9222967 (HEWLETT PACKARD COMPANY), 23 December 1992 (23.12.92), see whole document --	31,47
P,X	WO, A1, 9526596 (SCIENTIFIC-ATLANTA, INC.), 5 October 1995 (05.10.95), page 11 - page 13, abstract --	1,32
P,X	WO, A1, 9522233 (NEWBRIDGE NETWORKS CORPORATION), 17 August 1995 (17.08.95), see whole document --	1,32

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

Date of mailing of the international search report

25 July 1996

12.08.96

Name and mailing address of the International Searching Authority

Authorized officer



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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US 96/02348

**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim N .
X	EP, A2, 0661859 (TELIA AB), 5 July 1995 (05.07.95), see whole document  -----	31,47

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

01/07/96

International application No.

PCT/US 96/02348

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A1- 9222967	23/12/92	DE-D,T- 69116685 EP-A,A,B 0522211 JP-T- 6508008 US-A- 5477531	30/05/96 13/01/93 08/09/94 19/12/95
WO-A1- 9526596	05/10/95	NONE	
WO-A1- 9522233	17/08/95	NONE	
EP-A2- 0661859	05/07/95	NONE	

